

## **REMARKS**

The Examiner's Action and the references cited therein have been carefully studied by Applicant and the undersigned counsel. The amendments to the text of claims 1-5 and 7 appearing above and these explanatory remarks are believed to be fully responsive to the Action.

Relying on 35 U.S.C. § 102(b), the Examiner has rejected the subject matter of claims 1 and 2 as being anticipated by DeVincenzo et al. Applicant respectfully traverses the rejection and requests reconsideration.

Applicants respectfully submit that it is important to note that, historically, the Office and the Federal Circuit has required that for a § 102 anticipation rejection, a single reference must recite each and every element of the rejected claim. The Office has steadfastly and properly maintained that view.

The DeVincenzo patent fails this test as applied to the claims, as amended. DeVincenzo discloses a sub periosteal bone anchor with leaves. Applicant's claimed invention in independent claim 1 requires a "bone fastener" sized to protrude through said base arm aperture, "for anchoring said thin body securely to a bone". Conversely, the entire purpose of the DeVincenzo device is to secure the anchor to the tissue above the bone which is completely the opposite of applicant's invention. For example, as clearly explained in the DeVincenzo patent in column 2 starting in line 7 down to line 13 as follows:

"The stem plant does not use the undersurface bone metal interface for stabilization but relies on overgrowth of bone from the margins to finish the needed anchorage. Furthermore the edges of the base are scalloped and sloping to increase the length of the periphery to increase the surface area and to facilitate overgrowth of bone onto the top surface".

Clearly, DeVincenzo teaches away from Applicant's invention. Applicant's invention is concerned with applying direct, secure anchorage of the plate, directly to the bone. Applicant's device structurally requires that the bone anchor be sized and be such that it can securely anchor the plate to the bone. Therefore the devices are structurally different and function differently as to how they are attached when in use based upon this different structure. Applicant has amended Claims 1 through 5 to clearly require that Applicant's device include a bone fastener for securely fastening the plate to a bone. This structural feature is not shown in DeVincenzo and in fact DeVincenzo teaches away from such an anchor.

Applicant respectfully submits that claims 1 and 2, as amended, have not been anticipated by the DeVincenzo patent under 35 U.S.C. § 102(b), and respectfully request that such rejection be withdrawn.

The Examiner's rejection of claims 7 and 8 under 35 U.S.C. 103a as obvious over DeVincenzo is respectfully traversed. Applicant has amended independent claim 7 to include the method that has "securely anchoring and affixing said base to the bone"..."with at least one bone fastener..." This step is not shown, nor is it taught in DeVincenzo and in fact, as stated above, DeVincenzo teaches away from this method.

The Examiner's rejection of Claims 3-6 and 9 and 10 as obvious over DeVincenzo in view of Kanomi, et al is respectfully traversed. Again, Applicant reiterates Applicant's comments above concerning the fact that the DeVincezo reference teaches away from Applicant's structure and function and operates completely differently from Applicant's device. Therefore, DeVincenzo does not provide the basis in claims 3 through 6 or 9 and 10 to provide the combination as claimed by Applicant. Combining the references would not result in Applicant's claimed invention.

The Examiner's rejection of 35 U.S.C. Section 112, Second Paragraph. with claims 2 and 3 as being indefinite for failing to particularly point out and distinctly claim the subject matter for which Applicant regards as the invention is respectfully traversed. Applicant has amended Claim 2 to provide proper antecedent basis for first and second appliances and has deleted materials relative to the patient's mouth.

The Examiner's rejection of 35 U.S.C. 101 on the subject matter of claim 2 as attempting to claim human anatomy is respectfully traversed. Applicant has amended Claim 2 to remove references to the human anatomy.

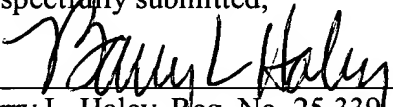
In summary it is Applicant's position that Applicant's invention as claimed provides an orthodontal device that is clearly patentable over the references of record.

A Notice of Allowance is earnestly solicited.

If the Office is not fully persuaded as to the merits of Applicant's position, or if an Examiner's Amendment would place the pending claims in condition for allowance, a telephone call to the undersigned would be appreciated.

If there are any additional charges, including extension of time, please bill our Deposit Account No. 13-1130.

Respectfully submitted,

  
Barry L. Haley, Reg. No. 25,339  
Joseph R. Englander, Reg. No. 38,871  
Malin, Haley & DiMaggio, P.A.  
1936 South Andrews Ave.  
Ft. Lauderdale, Florida 33316  
Tel: (954) 763-3303



**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

1. (Amended) An [a subperiosteal] orthodontic system for use as a bone anchor in conjunction with orthodontic appliances to treat malalignment of teeth, said system comprising:

a small, thin body having [an] a base and a bendable elongated central member having a far end [and a base];

said base having at least one arm including at least one aperture sized to receive at least one fastener for affixing said base to the bone;

a bone fastener sized to protrude through said base arm aperture for anchoring said thin body securely to a bone ; and

a wire guide connected to said far end of said central member for receiving orthodontic wire.

2. (Amended) The system of claim 1, including a first orthodontic appliance; a second orthodontic appliance; and orthodontic wire connected to said wire guide connecting [said] said [a] first orthodontic appliance to at least [one] said second orthodontic appliance [within the mouth of the patient in need of treatment] for use in applying tension for the movement of teeth.

3. (Amended) The system of claim 1, wherein said wire guide [orthodontic appliance] is used in conjunction with an orthodontic tension band bracket.

4. (Amended) An [A subperiosteal] orthodontic system for creating a stabilizing and moving force used in orthodontic treatment comprising:

a thin bone plate having a distal end formed of a biocompatible material, said plate having a base with at least one aperture extending therethrough;

a bone fastener [ to affix ] for affixing said base to the bone through plate aperture for securely fastening said plate to a bone ; and

tension band bracket affixed to said bone plate at said distal end of said base.

5. (Amended) A [subperiosteal] system as claimed in claim 4, including a wire guide attached to said bone plate at a distal end of said base.

7. (Amended) A method of [subperiosteal, non-osteointegrating] of orthodontic anchorage for use as a fixed pushing, pulling or stabilizing point in treating teeth and bite malalignments, the method comprising the steps of:

(a) providing a flat, rigid body, comprising:

a bendable base having at least one aperture adapted to receive at least one fastener for affixing said base to the bone;

at least one bendable elongated central member planarly extending from said base, the distal end of said central member having a first orthodontic appliance integrally formed thereto and adapted to receive wire for attachment to a second orthodontic appliance attached to a patient's tooth;

(b) making an incision in the oral soft tissue at the desired placement location to expose the bone on which said base is to be attached;

(c) securely anchoring and affixing said base to the bone with at least one bone fastener so that the base contacts the bone and the central member extends through the soft tissue of the jaw adjacent a non-occlusal surface of the teeth;

(d) affixing said first orthodontic appliance to at least a second orthodontic appliance attached to at least one tooth in the patient's mouth using orthodontic wire;

(e) adjusting said wire periodically until teeth or bite malalignment is corrected as determined by the orthodontist;

(f) after completion of the orthodontic treatment, disconnecting said first orthodontic appliance from said second orthodontic appliances, making an incision at the insertion site to reveal the base, unfastening and removing said base, surgically closing the incision and allowing the incision site to heal.